09-25-00 A

JC872 U.S. PTO 09/23/00

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PTO/SB/05 (4/98)
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UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 C.F.R. § 1.53(b))

Attorney Docket No.	Indigo 1
First Inventor or Application Identifier	McCormick et al.
Title	A Data Processing System ...
Express Mail Label No.	EJ836566681US

09230 U.S. PTO 09/668688 09/23/00

APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

ADDRESS TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231

1. [✔] * Fee Transmittal Form *(e.g., PTO/SB/17)* *(Submit an original and a duplicate for fee processing)*
2. [✔] Specification [Total Pages 23] *(preferred arrangement set forth below)*
   - Descriptive title of the Invention
   - Cross References to Related Applications
   - Statement Regarding Fed sponsored R & D
   - Reference to Microfiche Appendix
   - Background of the Invention
   - Brief Summary of the Invention
   - Brief Description of the Drawings *(if filed)*
   - Detailed Description
   - Claim(s)
   - Abstract of the Disclosure
3. [✔] Drawing(s) *(35 U.S.C. 113)* [Total Sheets 6]
4. Oath or Declaration [Total Pages 2]
   a. [✔] Newly executed (original or copy)
   b. [ ] Copy from a prior application (37 C.F.R. § 1.63(d)) *(for continuation/divisional with Box 16 completed)*
      i. [ ] DELETION OF INVENTOR(S) Signed statement attached deleting inventor(s) named in the prior application, see 37 C.F.R. §§ 1.63(d)(2) and 1.33(b).

NOTE FOR ITEMS 1 & 13: IN ORDER TO BE ENTITLED TO PAY SMALL ENTITY FEES, A SMALL ENTITY STATEMENT IS REQUIRED (37 C.F.R. § 1.27), EXCEPT IF ONE FILED IN A PRIOR APPLICATION IS RELIED UPON (37 C.F.R. § 1.28).

5. [ ] Microfiche Computer Program *(Appendix)*
6. Nucleotide and/or Amino Acid Sequence Submission *(if applicable, all necessary)*
   a. [ ] Computer Readable Copy
   b. [ ] Paper Copy (identical to computer copy)
   c. [ ] Statement verifying identity of above copies

ACCOMPANYING APPLICATION PARTS

7. [✔] Assignment Papers (cover sheet & document(s))
8. [ ] 37 C.F.R.§3.73(b) Statement *(when there is an assignee)* [ ] Power of Attorney
9. [ ] English Translation Document *(if applicable)*
10. [ ] Information Disclosure Statement (IDS)/PTO-1449 [ ] Copies of IDS Citations
11. [ ] Preliminary Amendment
12. [✔] Return Receipt Postcard (MPEP 503) *(Should be specifically itemized)*
13. [✔] * Small Entity Statement(s) *(PTO/SB/09-12)* [ ] Statement filed in prior application, Status still proper and desired
14. [ ] Certified Copy of Priority Document(s) *(if foreign priority is claimed)*
15. [✔] Other: Disclosure Document Refer; Filing & recordation fees

16. **If a CONTINUING APPLICATION,** *check appropriate box, and supply the requisite information below and in a preliminary amendment.*

[ ] Continuation [ ] Divisional [ ] Continuation-in-part (CIP) of prior application No: _____/_____

Prior application information: Examiner _____ *Group / Art Unit:* _____

For CONTINUATION or DIVISIONAL APPS only : The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 4b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

17. CORRESPONDENCE ADDRESS

[☑] *Customer Number or Bar Code Label* (Insert Customer No. or Attach bar code label here) 022838 or [ ] *Correspondence address below*

Name	PATENT TRADEMARK OFFICE				
Address					
City		State	NJ	Zip Code	
Country		Telephone		Fax	

Name (Print/Type)	Wayne S. Breyer	Registration No. (Attorney/Agent)	38,089
Signature	Wayne S. Breyer	Date	09-23-2000

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FEE TRANSMITTAL for FY 2000

Patent fees are subject to annual revision.
Small Entity payments must be supported by a small entity statement, otherwise large entity fees must be paid. See Forms PTO/SB/09-12
See 37 C.F.R. §§ 1.27 and 1 28

TOTAL AMOUNT OF PAYMENT ($) 424

Complete if Known	
Application Number	
Filing Date	
First Named Inventor	McCormick et al.
Examiner Name	
Group / Art Unit	
Attorney Docket No.	Indigo 1

09230 U.S. PTO 09/668680 09/23/00

METHOD OF PAYMENT (check one)

1. ☐ The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to.

Deposit Account Number

Deposit Account Name

☐ Charge Any Additional Fee Required Under 37 CFR §§ 1.16 and 1.17

2. ☑ **Payment Enclosed:**
☑ Check ☐ Money Order ☐ Other

FEE CALCULATION

1. BASIC FILING FEE

Large Entity Fee Code	Large Entity Fee ($)	Small Entity Fee Code	Small Entity Fee ($)	Fee Description	Fee Paid
101	690	201	345	Utility filing fee	345
106	310	206	155	Design filing fee	
107	480	207	240	Plant filing fee	
108	690	208	345	Reissue filing fee	
114	150	214	75	Provisional filing fee	

SUBTOTAL (1) ($) 345

2. EXTRA CLAIM FEES

		Extra Claims		Fee from below	Fee Paid
Total Claims	19	-20** =	0	X 9	= 0
Independent Claims	4	- 3** =	1	X 39	= 39
Multiple Dependent					= 0

**or number previously paid, if greater, For Reissues, see below

Large Entity Fee Code	Large Entity Fee ($)	Small Entity Fee Code	Small Entity Fee ($)	Fee Description
103	18	203	9	Claims in excess of 20
102	78	202	39	Independent claims in excess of 3
104	260	204	130	Multiple dependent claim, if not paid
109	78	209	39	** Reissue independent claims over original patent
110	18	210	9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) ($) 39

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity Fee Code	Large Entity Fee ($)	Small Entity Fee Code	Small Entity Fee ($)	Fee Description	Fee Paid
105	130	205	65	Surcharge - late filing fee or oath	
127	50	227	25	Surcharge - late provisional filing fee or cover sheet.	
139	130	139	130	Non-English specification	
147	2,520	147	2,520	For filing a request for reexamination	
112	920*	112	920*	Requesting publication of SIR prior to Examiner action	
113	1,840*	113	1,840*	Requesting publication of SIR after Examiner action	
115	110	215	55	Extension for reply within first month	
116	380	216	190	Extension for reply within second month	
117	870	217	435	Extension for reply within third month	
118	1,360	218	680	Extension for reply within fourth month	
128	1,850	228	925	Extension for reply within fifth month	
119	300	219	150	Notice of Appeal	
120	300	220	150	Filing a brief in support of an appeal	
121	260	221	130	Request for oral hearing	
138	1,510	138	1,510	Petition to institute a public use proceeding	
140	110	240	55	Petition to revive - unavoidable	
141	1,210	241	605	Petition to revive - unintentional	
142	1,210	242	605	Utility issue fee (or reissue)	
143	430	243	215	Design issue fee	
144	580	244	290	Plant issue fee	
122	130	122	130	Petitions to the Commissioner	
123	50	123	50	Petitions related to provisional applications	
126	240	126	240	Submission of Information Disclosure Stmt	
581	40	581	40	Recording each patent assignment per property (times number of properties)	40
146	690	246	345	Filing a submission after final rejection (37 CFR § 1.129(a))	
149	690	249	345	For each additional invention to be examined (37 CFR § 1.129(b))	

Other fee (specify) _____

Other fee (specify) _____

* Reduced by Basic Filing Fee Paid

SUBTOTAL (3) ($) 40

SUBMITTED BY

Name (Print/Type)	Wayne S. Breyer	Registration No. (Attorney/Agent)	38,089	Telephone	(732) 706-3497
Signature	Wayne S Breyer			Date	09-23-2000

Complete *(if applicable)*

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PTO/SB/10 (1-99)
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Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

STATEMENT CLAIMING SMALL ENTITY STATUS (37 CFR 1.9(f) & 1.27(c))--SMALL BUSINESS CONCERN

Docket Number (Optional)
Indigo 1 (570-1)

Applicant, Patentee, or Identifier: Indigo 1 (570-1)
Application or Patent No.: Not Yet Assigned
Filed or Issued: Not Yet Assigned
Title: Data Processing System For Providing An Efficient Market For Specia

I hereby state that I am
- ☐ the owner of the small business concern identified below:
- ☑ an official of the small business concern empowered to act on behalf of the concern identified below:

NAME OF SMALL BUSINESS CONCERN IndigoB2B.com

ADDRESS OF SMALL BUSINESS CONCERN 240 Martin Luther King Blvd., Newark, NJ 07102

I hereby state that the above identified small business concern qualifies as a small business concern as defined in 13 CFR Part 121 for purposes of paying reduced fees to the United States Patent and Trademark Office. Questions related to size standards for a small business concern may be directed to: Small Business Administration, Size Standards Staff, 409 Third Street, SW, Washington, DC 20416.

I hereby state that rights under contract or law have been conveyed to and remain with the small business concern identified above with regard to the invention described in:

- ☑ the specification filed herewith with title as listed above.
- ☐ the application identified above.
- ☐ the patent identified above.

If the rights held by the above identified small business concern are not exclusive, each individual, concern, or organization having rights in the invention must file separate statements as to their status as small entities, and no rights to the invention are held by any person, other than the inventor, who would not qualify as an independent inventor under 37 CFR 1.9(c) if that person made the invention, or by any concern which would not qualify as a small business concern under 37 CFR 1.9(d), or a nonprofit organization under 37 CFR 1.9(e).

Each person, concern, or organization having any rights in the invention is listed below:
- ☑ no such person, concern, or organization exists.
- ☐ each such person, concern, or organization is listed below.

Separate statements are required from each named person, concern or organization having rights to the invention stating their status as small entities. (37 CFR 1.27)

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b))

NAME OF PERSON SIGNING Christopher C. McCormick

TITLE OF PERSON IF OTHER THAN OWNER President

ADDRESS OF PERSON SIGNING 240 Martin Luther King Blvd., Newark, NJ 07102

SIGNATURE _____ DATE 9-19-00

A DATA PROCESSING SYSTEM FOR PROVIDING AN EFFICIENT MARKET FOR SPECIALTY CHEMICALS

Field of the Invention

The present invention relates to electronic commerce in general, and, more particularly, to a data processing system that provides an efficient market for the purchase and sale of specialty chemicals.

Background of the Invention

The chemical industry traditionally divides the market for the sale of chemicals into: (i) bulk chemicals, and (ii) specialty chemicals. Bulk chemicals are typically manufactured using a continuous-flow process, and the process is continually monitored and adjusted to ensure that the resulting product has the desired chemical and physical characteristics. In contrast, specialty chemicals are typically manufactured in discrete batches, and although suppliers desire that the chemical and physical characteristics of the resulting product are identical from batch to batch, variations do occur. Typically, such variability is evaluated using a "standard" and a "specification."

Typically, a supplier or manufacturer (hereinafter collectively "supplier") establishes a standard for each specialty chemical that it sells. For the purposes of this disclosure, the "**standard**" for a specialty chemical is defined as the set of chemical and physical characteristics that are used to describe that specialty chemical. Typically, although not necessarily, a standard is based on the empirical measurements of a sample of a previously-manufactured chemical. Illustrative chemical and physical characteristics include, but are not limited to, hue rating, dichroism rating, dispersion rating, lightness rating, impurities concentrations, *etc.* Often, the standard for any given specialty chemical comprises over one hundred different chemical and physical characteristics.

To further evaluate the variability of discrete batches, the supplier establishes a "specification." For the purposes of this disclosure, the "**specification**" for a specialty chemical is defined as the nominal range for each chemical and physical characteristic listed in the standard. Typically, an upper limit and a lower limit for each chemical and physical characteristic is provided in the specification.

There is usually more than one testing method that can be used to evaluate any particular chemical and physical characteristic of a specialty chemical. Furthermore, it is not atypical for such

testing methods to use different scales or bases for evaluating the characteristic. Moreover, testing methods have, in certain cases, idiosyncrasies that tend to skew the data. Because the testing method used typically affects the empirical data obtained for a chemical or physical characteristic, the specification for each chemical and physical characteristic that is evaluated is associated with a testing method. Table 1 depicts a portion of the standard and specification for an illustrative specialty chemical, "Specialty Chemical A."

Standard	Specification		
Characteristic	**Test Method**	**Upper Limit**	**Lower Limit**
Dichroism Rating	Method 1	3 MD	3 LD
Dichroism Rating	Method 2	3.5 MD	2.5 LD
Lightness Rating	Method 3	3 H	3 D
Purity Rating	Method 4	3 P	3 T
Hue Rating	Method 5	3 Y	3 B
Color Strength Rating	Method 6	2 +	2 –
PH	Method 7	9.5	6.5
Arsenic content, ppm	Method 8	50	
Chromium content, ppm	Method 9	100	
Mercury content, ppm	Method 10	25	

Table 1 — For Specialty Chemical A

The supplier evaluates each batch in accordance with the standard for that specialty chemical and relative to its specification. In other words, a sample of each such batch is tested to obtain a measurement of each chemical and physical characteristic listed in the standard and using the appropriate testing method listed in the specification. Using the empirical data gathered from such tests and the upper and lower limits listed in the specification, the supplier then declares whether the batch is "in-specification" or "out-of-specification" as to each chemical and physical characteristic. Thus, a supplier establishes a standard and specification for each specialty chemical that it manufactures and/or sells and evaluates each batch of specialty chemical relative to the appropriate standard and specification. This approach provides the supplier and a prospective purchaser with a means for evaluating the variation in, and suitability of, each batch of each specialty chemical.

This technique is, however, disadvantageous.

Many consumers of specialty chemicals would prefer to have multiple sources from which to buy their specialty chemicals because it gives them the opportunity to price shop and also because it

gives them an secondary source for their specialty chemicals. But comparing the offerings of a single specialty chemical from multiple suppliers is problematic because it is the supplier, and not the purchaser, that sets the standard and specification for its products. And the standards and specifications established by any one specialty chemical supplier for its products are almost always different from those established by other suppliers.

This problem is illustrated in FIG. 1A, wherein prospective purchaser **106-1**, who is interested in specialty chemical A, considers purchasing specialty chemical A from three different suppliers, suppliers **104-1**, **104-2**, and **104-3**.

Each of the suppliers analyzes the batches of specialty chemicals that they produce in their own laboratories. In particular, as illustrated in FIG. 1, supplier **104-1** analyzes its samples in its laboratory or test facility **107-1**, supplier **104-2** analyzes its samples in its test facility **107-2** and supplier **104-3** tests its samples in test facility **107-3**.

Supplier **104-1** analyzes its batches of specialty chemical A using standard 1 and specification 1. Analogously, supplier **104-2** uses standard 2 and specification 2, and supplier **104-3** uses standard 3 and specification 3. Table 2 depicts the standard and testing method that each of the three suppliers uses for specialty chemical A.

	Supplier 104-1		**Supplier 104-2**		**Supplier 104-3**	
Standard	**Used?**	**Test Method**	**Used?**	**Test Method**	**Used?**	**Test Method**
Dichroism Rating	**Yes**	**1**	**Yes**	**2**	**Yes**	**1**
Lightness Rating	**Yes**	**3**	**Yes**	**3**	**No**	**N/A**
Purity Rating	**Yes**	**4**	**No**	**N/A**	**Yes**	**5**
Hue Rating	**No**	**N/A**	**Yes**	**6**	**Yes**	**6**
PH	**Yes**	**7**	**Yes**	**8**	**Yes**	**9**

TABLE 2 — Standards and Testing Methods For Specialty Chemical A

It can be seen from TABLE 2 that suppliers **104-1**, **104-2** and **104-3** use different standards. In particular, supplier **104-1** does not measure hue rating, supplier **104-2** does not measure purity rating, and supplier **104-3** does not measure lightness rating. Moreover, to the extent that the various suppliers are measuring the same characteristic, they are, in some cases, using different testing methods for evaluating the characteristics. For example, suppliers **104-1** and **104-3** use method "1" to

measure dichroism, but supplier **104-2** uses a different method. As stated above, even though testing method #1 and #2 are intended to measure the same chemical or physical characteristic, the two testing methods are likely to indicate different values, and, therefore, comparing the results of testing method #1 to testing method #2 is like comparing apples to oranges.

As a consequence, prospective purchaser **106-1** might have difficulty comparing the batches of specialty chemical *A* offered by the three suppliers. Furthermore, prospective purchaser **106-1** might have some reservations about the objectivity of the test results because each supplier tests its own products. One solution to this problem is provided by third-party testing facilities (*e.g.*, www.worldwidetesting.com, *etc.*) that offer buyers and sellers the benefit of independent (*i.e.*, objective) testing.

The service provided by a third-party testing facility is depicted in FIG. 1B. As depicted in FIG. 1B, the chemical and physical tests are performed by third-party testing facility **107**, which is not owned or otherwise associated with suppliers **104-1**, **104-2** and **104-3**. Although FIG. 1 depicts only one third-party testing facility, in practice there are many more such testing facilities in existence.

Although third-party testing facilities overcome the problem of the objectivity of test results, prospective purchasers are still faced with the problem of how to directly compare product offerings from different suppliers.

Therefore, the need exists for techniques that enable prospective purchasers to compare specialty chemical offerings from different suppliers.

Summary of the Invention

The present invention is a data processing system and method for facilitating the sale of specialty chemicals that avoids some of the costs and disadvantages of techniques in the prior art.

In particular, some embodiments of the present invention establish a uniform standard and specification for each specialty chemical that is being offered for sale via the embodiment. The uniform standard and specification is advantageously supplier *independent*, and advantageously encompasses most, if not all, of the standards used by the individual suppliers. Consequently, one standard and one specification are advantageously established for each specialty chemical. In this

manner, the present invention benefits a prospective purchaser by facilitating a direct comparison of offerings from different suppliers.

Although this is clearly advantageous for purchasers of specialty chemicals, it is also advantageous for the suppliers of specialty chemicals because it enables them to sell non-branded products, and to sell branded products as unbranded. This is advantageous because it provides the supplier of a branded specialty chemical with an alternative marketing/sales channel that does not affect the branded specialty chemical. Furthermore, the supplier can sell the branded specialty chemical as unbranded through embodiments of the present invention at substantial discounts without offending the traditional customers of its branded product.

For example, a situation might arise when a supplier of specialty chemicals has excess inventory of a specialty chemical. To sell such inventory quickly, the supplier might be willing to price the excess specialty chemical below its normal selling price. If a customer of the supplier who had paid the normal price for that specialty chemical learned of this sale, problems would almost certainly arise.

One way to avoid this complication is to sell the excess inventory as a "unbranded" chemical. In other words, the specialty chemical is not identified as being manufactured by the supplier nor is it sold under its trademark. But to what standard and specification does the supplier reference the specialty chemical? If the standard and the specification that it normally used to characterize that specialty chemical are used with the non-branded material, the supplier risks being identified. The illustrative embodiment, wherein a uniform standard and specification is established for each specialty chemical, enables the manufacture to sell its branded products as unbranded, at steep discounts, without compromising itself as the supplier.

In accordance with the present teachings, a sample of each batch of specialty chemical that is available for purchase through the data processing system is analyzed by an independent testing facility, in accordance with the uniform standard established for the chemical. The test results are input into the data processing system and, in some embodiments, are organized into an inventory database. A prospective purchaser patronizing the data processing system establishes a requirement for the specialty chemical that it wishes to purchase. The requirement defines acceptable ranges for the measured values of at least some of the chemical and physical characteristics in the applicable uniform standard.

After the prospective purchaser enters its requirement into the data processing system, the data processing system searches the inventory database in an attempt to identify batches of the specialty chemical for sale that satisfy the purchaser's requirement. If any batches of the specialty chemical are identified that satisfy the purchaser's requirement, then that is reported to the prospective purchaser so that it can purchase the batch through the data processing system.

The illustrative embodiment of the present invention comprises: receiving, at a data processing system, a requirement for a specialty chemical from a prospective purchaser; matching, in the data processing system, the requirement to the results of analyses performed on batches of the specialty chemical available for purchase through the data processing system to identify a batch that satisfies the requirement; and outputting, from the data processing system, an indicium of the batch to the prospective purchaser.

In some embodiments of the present invention, information concerning the purchasing activity of patrons of the data processing system is advantageously compiled. Such information might be valuable to suppliers, among others entities, and is advantageously offered (*e.g.*, for sale, *etc.*) to interested parties.

Brief Description of the Drawings

FIG. 1A depicts a typical interaction, in the prior art, between suppliers of specialty chemicals and a prospective purchaser preliminary to the sale/purchase of a specialty chemical.

FIG. 1B depicts an interaction, via a prior art e-commerce site, between suppliers of specialty chemicals and a prospective purchaser preliminary to the sale/purchase of a specialty chemical.

FIG. 2 depicts a schematic diagram of the illustrative embodiment of the present invention.

FIG. 3 depicts a block diagram of data processing system **202** depicted in FIG. 2.

FIG. 4 depicts a block diagram of data storage device **320** depicted in FIG. 3.

FIG. 5 depicts a flowchart of a first method in accordance with the present invention.

FIG. 6 depicts an illustrative method for carrying out operation **540** of the method depicted in FIG. 5.

FIG. 7 depicts, via block flow diagram, the method depicted in FIG. 6.

FIG. 8 depicts analyses of specialty chemicals offered for sale over the data processing system being stored in an inventory database.

FIG. 9 depicts, via block flow diagram, a prospective purchaser defining a requirement for a specialty chemical that it wishes to buy, and further depicts operation **540** and **542** of the method depicted in FIG. 8, and further depicts the compiling of statistics and the disbursement of such statistics to statistics subscribers.

Detailed Description

FIG. 2 depicts a schematic diagram of the illustrative embodiment of the present invention in which data processing system **202** provides a market for the purchase and sale of specialty chemicals. The specialty chemicals, which are being sold by a plurality of suppliers, suppliers **104-1** through **104-*n***, may be purchased by a plurality of prospective purchasers **106-1** through **106-*m***.

The heart of the illustrative embodiment is data processing system **202** that:

- receives data from one or more testing facilities **208** that test, according to a uniform standard and testing methods, samples of batches of specialty chemicals that are provided by specialty chemicals suppliers **104-1** through **104-*n***;
- stores the empirical testing data in an inventory database;
- receives requirements data from prospective purchaser **106-1**, *etc.*, concerning a specialty chemical that it wishes to purchase;
- attempts to identify, using the inventory database, at least one batch of specialty chemical that satisfies the requirements data of the prospective purchaser; and
- facilitates a sale of the identified batch by advising the prospective purchaser of the existence of the identified batch.

Some of the information that is input into and/or is generated by data processing system **202** might be valuable. For example, specialty chemicals suppliers **104-1** through **104-*n*** might have an interest in, and might be willing to pay for, information about the purchasing activity of other patrons of the present invention.

Consequently, in some embodiments of the present invention, information (hereinafter "**statistics**") is offered (*e.g.*, for purchase, *etc.*) to interested parties, which may include specialty chemicals suppliers and/or others (hereinafter collectively referred to as **"statistics subscribers" 210**).

Overview of Data Processing System Operations and Communications

Each prospective purchaser and specialty chemicals supplier is advantageously capable of providing data to and receiving data from data processing system **202** via a data network (*e.g.*, the Internet, *etc.*) or via a telephone network (*e.g.*, the Public Switch Telephone Network, *etc.*) or both. Moreover, any testing facility **208** that is not co-located with data processing system **202** (hereinafter a "remote testing facility"), advantageously communicates with data processing system **202** via a data network or via a telephone network or both.

FIG. 3 depicts an illustrative embodiment of data processing system **202**, which comprises: data network interface **312**, telephone network interface **314**, telephone center **316**, computer **318**, data storage device **320**, local output device **322** and local input device **324**.

Data network interface **312** enables prospective purchasers, suppliers, testing facilities and statistics subscribers to communicate with data processing system **202** via a data network, such as the Internet. For example, data processing system **202** can be accessed via the World Wide Web.

Alternatively, prospective purchasers, suppliers, testing facilities and statistics subscribers can communicate with data processing system **202** via telephone, such as through a toll-free "800" number. To this end, telephone network interface **314** advantageously comprises one or more telephones that are capable of receiving calls from and placing calls to prospective purchasers, testing facilities and statistics subscribers. Telephone network interface **314** can further comprise an automatic call distribution system, in well-known fashion, for routing incoming calls to the various telephones. Furthermore, telephone network interface **314** is advantageously capable of receiving information from prospective purchasers, suppliers, testing facilities and statistics subscribers via a touch-tone interface wherein the parties input information into the system by pushing the buttons on their telephones in response to queries from an automated operator.

Telephone center **316** advantageously comprises one or more computer terminals. The terminals are operated by personnel associated with telephone network interface **314** such that an operator (either human or automated) can shuttle data between computer **318** and prospective

purchasers, suppliers, testing facilities or statistics subscribers that are in contact with data processing system **202** via telephone network interface **314**.

Computer **318** is advantageously a general-purpose computer as is well-known in the art that is capable of:

- receiving data from and outputting data to telephone center **316**;
- receiving data from and outputting data to data network interface **312;**
- executing one or more programs that are stored in data storage device **320**;
- storing data in and retrieving data from data storage device **320**;
- providing data to local output device **322**; and
- receiving data from local input device **324**.

Data storage device **320** is advantageously a non-volatile memory, such as a hard disk, for storing program code executed by computer **318** and for storing the data that is input into and generated by data processing system **202**. More particularly, data storage device **320** advantageously comprises program code **426**, uniform standards database **428**, specifications database **430**, inventory database **432**, customer requirements database **434** and statistics database **436** (*see* FIG. 4.), all of which are described in more detail later in this disclosure.

Data from data processing system **202** is advantageously output to local output device **322** for delivery to suppliers, prospective purchasers and statistics subscribers. Local output device **322** can be, without limitation, a printer, a tape drive, removable hard disk (*e.g.*, zip drive, *etc.*) or magneto-optical drive (*e.g.*, DVD-ROM drive, *etc.*). Of course, the data can be output directly to data network interface **312** and routed, by the network, to the intended recipient if appropriate data transfer capabilities (*e.g.*, high-speed data line) are available.

In embodiments of the present invention in which testing facility **208** is co-located near data processing system **202** (*i.e.*, wherein it is physically located near computer **318**), hereinafter referred to as a "**local testing facility**," local input device **324** is advantageously used to deliver data to data processing system **202**. Local input device **324** can be, without limitation, any of the test equipment used at testing facility **208** (*i.e.*, for testing samples of batches of specialty chemicals) that can generate a signal indicative of the test results. Such equipment will advantageously include an analog-to-digital ("A/D") converter, although an outboard A/D converter may suitably be used. A

digital signal representative of the test results is thereby delivered to data processing system **202**. Alternatively, test results can, of course, be manually input (*i.e.*, via a terminal, *etc.*) to data processing system **202**.

It will be clear to those skilled in the art how to make and use data network interface **312**, telephone network interface **314**, telephone center **316**, computer **318**, data storage device **320**, local output device **322** and local input device **324**. Although data processing system **202** is shown as including only one computer and one storage device, it will be understood that a data processing system in accordance with the present invention can also comprise two or more computers and two or more storage devices.

Establishing a Uniform Standard and Specification

The illustrative embodiment of the present invention establishes a uniform standard for each specialty chemical that is offered for sale via data processing system **202**. As used in this *disclosure*, the term "**uniform standard**" is defined as a *supplier-independent* set of chemical characteristics or physical characteristics or both that are used to describe a chemical. Typically, although not necessarily, a uniform standard is based on the empirical measurements of a sample of a previously-manufactured chemical. Alternatively, a uniform standard can be based on the desires or needs of an entity without having first been manufactured.

The chemical and physical characteristics listed in a standard are typically indicative or predictive of a performance attribute of the specialty chemical, although there may be other reasons for including a particular chemical and physical characteristic. For instance, a chemical or physical characteristic may be included solely for historical reasons (*i.e.*, because it has traditionally be reported). An example of chemical and physical characteristics include, without limitation, hue rating, dichroism rating, purity rating, transparency rating, impurities concentrations, *etc.* The uniform standard for any given specialty chemical will typically comprise many characteristics. The exact number for any given specialty chemical is a function of the specialty chemical itself and what prospective purchasers need and desire. Those skilled in the art will be able to develop a suitable set of chemical and physical characteristics for any given specialty chemical.

A variety of different testing methods may be available for measuring or evaluating any given chemical or physical characteristic. Such different testing methods might evaluate a given chemical and physical characteristic on a different basis (*e.g.*, on a different scale, by a different measurement,

etc.). Consequently, in addition to establishing a set of chemical and physical characteristics, specific testing methods are selected for measuring/evaluating the selected characteristics.

It will be appreciated to those skilled in the art that any given specialty chemical might have many uses. The chemical and physical characteristics of interest to a prospective purchaser will therefore depend, to some extent, upon the use that it makes of the specialty chemical. Consequently, the uniform standard (*i.e.*, chemical and physical characteristics and testing methods) for each specialty chemical being sold via data processing system **202** is advantageously developed by the owners/operators of data processing system **202** through discussions with prospective purchasers and suppliers.

Uniform standards that are developed in accordance with the present teachings can be expected, for at least for some specialty chemicals, to comprise more characteristics than the "standards" in the prior art for that specialty chemical. But the present uniform standards are expected to have wide applicability and to be accepted by most prospective purchasers and most suppliers.

The uniform standard for each specialty chemical that is offered for sale over data processing system **202** is advantageously stored in uniform standards database **428**. The testing methods used for measuring the chemical and physical characteristics comprising the standard are advantageously stored in uniform standards database **428**, as well.

In accordance with some embodiments of the present invention, a specification is established for each specialty chemical. The specification for each specialty chemical that is offered for sale over data processing system **202** is advantageously stored in specifications database **430**.

An Illustrative Method in Accordance with The Present Invention

FIG. 5 depicts a flowchart of method **500** in accordance with the illustrated embodiment of the present invention. For pedagogical purposes, method **500** is first described briefly below and then the various operations that comprise the method are described in further detail in conjunction with FIGS. 6 through 9.

In accordance with operation **538** of method **500**, a "requirement" is received, by data processing system **202**, from a prospective purchaser. As described in more detail later in this disclosure, the requirement indicates, for a specialty chemical of interest, allowed ranges (from a prospective purchaser's point of view) for the measured values of the various chemical and physical

characteristics that make up the uniform standard. That is, the analyses of a batch of specialty chemical must fall within the specified ranges to be acceptable for purchase by the prospective purchaser.

In accordance with operation **540**, the purchaser-defined requirement is compared to the results of analyses of batches of that specialty chemical that is being offered for sale via data processing system **202**. Batches that satisfy the prospective purchaser's requirement are identified. In operation **542**, an indicium of the batch(es) satisfying the requirement is output from data processing system **202** to the prospective purchaser.

The various operations comprising method **500** are now described in further detail.

In operation **540**, the purchaser-defined requirement is compared, by data processing system **202**, to the analyses of batches of specialty chemicals to identify a batch that satisfies the requirement. Consequently, to carry out operation **540**, such analyses must be obtained and compiled by data processing system **202**. As depicted in FIG. 6, these steps —"obtaining analyses" (step **644**) and "compiling analyses" (step **646**) — comprise a method for carrying out operation **540**. Steps **644** and **646** are described in further detail with reference to FIGS. 7 and 8.

In some embodiments of the present invention, analyses of batches are obtained (step **644**) by testing sample(s) of specialty chemical(s), typically provided by suppliers thereof, according to a uniform standard established for each particular specialty chemical.

Such testing is depicted in FIG. 7 wherein specialty chemicals supplier **104-1** delivers sample **S1** from one of its batches of specialty chemical *A* to testing facility **208**. Similarly, specialty chemicals supplier **104-2** delivers sample **S2** from a batch of specialty chemical *A* to testing facility **208** and specialty chemicals supplier **104-3** delivers sample **S3** from one of its batches of specialty chemical *A* to testing facility **208**. It will be understood, of course, that the present method can be practiced with more than the illustrative three specialty chemicals suppliers, with more samples, with more specialty chemicals, and with more than the one testing facility depicted in FIG. 7.

Each of samples **S1**, **S2** and **S3** is tested by testing facility **208** in accordance with the uniform standard established for specialty chemical *A*. In other words, measurements are taken for each of samples **S1**, **S2** and **S3** to determine a value for each of the chemical and physical characteristics that are included in the uniform standard for specialty chemical *A*. The chemical and

physical characteristics are measured using the particular testing methods specified by the uniform standard.

Using the uniform standard, in accordance with the present teachings, as the basis for testing, the samples (each representative of a batch of specialty chemical *A* from one of the three suppliers) can truly be compared by a prospective purchaser on an "apples-to-apples" basis.

Referring to FIG. 6, according to step **646**, the analyses of each batch of specialty chemical being offered for sale via data processing system **202** is compiled in data processing system **202**. This operation is illustrated in FIG. 7, wherein the sample analyses are depicted as being in the form of three signals that are input into data processing system **202**. More particularly, signal **RS1** carries information indicative of the analyses for sample **S1**, signal **RS2** carries information indicative of the analyses for sample **S2**, signal **RS3** carries information indicative of the analyses for sample **S3**. As previously described, such signals can be generated, for example, by the test equipment that performs the analyses of samples.

As depicted in FIG. 8, in some embodiments of the present invention, the analyses are advantageously organized into inventory database **432**, in known fashion.

As additional batches of specialty chemicals become available for sale over data processing system **202**, a sample of each such batch is provided to testing facility **208** for testing in accordance with the uniform standard for that particular specialty chemical. As described above, the analyses are compiled, such as in inventory database **432**. In this manner, inventory database **432** is updated as additional batches of specialty chemicals become available for purchase through data processing system **202**.

Operations **538** and **540** involve a "requirement" that is specified by a prospective purchaser concerning a particular specialty chemical that it wishes to buy. In operation **538**, the requirement is received by the data processing system, and in operation **540**, the requirement is compared to the analyses of the specialty chemicals available for purchase.

As described below, this "requirement" is analogous to the previously described "specification." The difference is that a prospective purchaser defines the requirement, while a supplier, at least traditionally, defines the specification. In accordance with the present teachings, the prospective purchaser defines the requirement in one of several ways.

For example, in one embodiment of the present invention, the prospective purchaser is presented (by data processing system **202**) with a list of chemical and physical characteristics and testing methods for a particular specialty chemical that it wishes to buy. The prospective purchaser defines, for at least some of the chemical and physical characteristics (*i.e.*, those considered to be important), a range of acceptable values. That is, a minimum value and maximum value are advantageously listed for at least some chemical and physical characteristics.

Thus, the term "requirement" refers, in this embodiment, to the aforementioned prospective-purchaser defined range of acceptable values for at least a part of the set of chemical and physical characteristics comprising the uniform standard for a particular specialty chemical. This embodiment is depicted, figuratively, in FIG. 9 at block **950** wherein prospective purchaser **106-1** has access to uniform standards database **428**.

Rather than defining its own requirement "from scratch" as in the above-described embodiment, a prospective purchaser might prefer to use a specification that has been previously established for the specialty chemical that it wishes to buy. This is depicted, figuratively, in FIG. 9 at block **950**, wherein prospective purchaser **106-1** has access to specifications database **430**.

The established specification can be the specification developed for the particular specialty chemical by the owner/operator of data processing system **202**. Or, based on a past sales relationship with a specific supplier, a prospective purchaser might wish to use that supplier's specification for the particular specialty chemical that it wants to buy. Thus, the established specification can alternatively be the specification developed for the particular specialty chemical by any of the suppliers patronizing the system.

To the extent that a supplier's specification applies to chemical and physical characteristics or testing methods that are different than those comprising the uniform standard, such a specification, or certain entries in the specification, cannot be used. Specifications from suppliers are advantageously stored in specifications database **430**.

Typically, a prospective purchaser's requirement for a particular specialty chemical will not change with repeated purchases. Consequently, in some embodiments of the present invention, the prospective purchaser **106-1** advantageously stores its requirement for a particular specialty chemical in requirements database **434**. For subsequent purchases of the same specialty chemical, the prospective purchaser simply references its archived requirement. This is figuratively depicted in FIG. 9 at block **950**, wherein the prospective purchaser has access to requirements database **434**.

As used herein, the term "**requirement**" or "**defining a requirement**" encompasses all of the above-described embodiments (*i.e.*, specifying a range for some or all of the characteristics in the uniform standard, referencing a specification stored in specifications database **430** and referencing a requirement stored in requirements database **434**).

Referring now to FIG. 5, operation **540** requires comparing the requirement to the analyses. In one embodiment in accordance with the present teachings, the comparison operation involves searching inventory database **432** for batches of the specialty chemical of interest that meet or satisfy the requirement. As used herein the phrase "**satisfy the requirement**" or "**satisfies the requirement**" means that the measured values for the various physical and chemical characteristics (*i.e.*, the analyses of a batch) fall within the nominal ranges for such values as specified in the requirement. Operation **540** is depicted, figuratively, in FIG. 9 at block **952.**

In accordance with operation **542**, the prospective purchaser is notified of the results of comparison operation **540**. The analyses of the batch or batches meeting the requirement are advantageously provided to the prospective purchaser. In some embodiments of the invention, an indicium that uniquely identifies (*e.g.*, via a code, *etc.*) each selected batch of specialty chemical is provided to the prospective purchaser. In some embodiments of the present invention, the indicium does not otherwise provide any identifying information about the batch (*e.g.*, the identity of the supplier, the brand name of the product, *etc.*) to the prospective purchaser. The notification operation is figuratively depicted in FIG. 9 by signal **954** that is routed to prospective purchaser **106-1**.

It will be appreciated that the requirement defined by a prospective purchaser may include a substantial list of chemical and physical characteristics. Consequently, it is anticipated that, at least in some instances, all batches of the specialty chemical of interest in inventory may be out of range (*i.e.*, not meet the requirement) for at least some of the characteristics. To that end, in some embodiments in accordance with the present teachings, the prospective purchaser can assign a priority to each chemical and physical characteristic.

For example, in some embodiments, if a relatively "higher" priority is assigned to certain chemical and physical characteristics, the requirement for those characteristics must be met for a batch of the specialty chemical in inventory to be considered acceptable for purchase. On the other hand, if a batch of specialty chemical does not satisfy the requirement for several characteristics that are assigned a relatively "lower" priority, the batch may still be considered to be acceptable (*i.e.*, meeting the requirement). As a consequence, batches of a specialty chemical of interest that would

otherwise not pass muster are brought to the attention of a prospective purchaser. In this manner, among others, data processing system **102** facilitates the sale of specialty chemicals. Those skilled in the art are readily able to assign such priorities as a function of the intended application for the specialty chemical.

Apprised by data processing system **202** of suitable batches of a specialty chemical, the prospective purchaser can choose to purchase one or more of the batches. A purchase is made via data processing system **202** using telephone, e-mail, *etc.* This operation is figuratively depicted in FIG. 9 wherein signal **956** is sent to data processing system **202**.

Data processing system **202** advantageously compiles statistics concerning activity within the data processing system. The statistics might include, but are not limited to:

- The amount of a particular specialty chemical that is purchased by a specific purchaser;
- The relative sales volumes of the various specialty chemicals being sold over the data processing system;
- The requirement defined for specific specialty chemicals by prospective purchasers; and
- Time sensitive or perishable information concerning when a purchase of a particular specialty chemical occurs.

Regarding time sensitive or perishable information, the purchasing activity of a patron of data processing system **202** might be indicative, in some cases, of additional specialty chemicals that it may soon purchase.

For example, assume that the manufacture of product ***X*** requires specialty chemicals ***A***, ***B***, ***C***, ***D*** and ***E***. Also assume that, as a function of the manufacturing process, specialty chemicals ***A*** and ***B*** are obtained and used first, specialty chemicals ***C*** and ***D*** are obtained and used second, and specialty chemical ***E*** is obtained and used last.

Consequently, when a patron of data processing system **202** has ordered specialty chemicals ***A*** and ***B***, it is known to a high degree of certainty that the patron is manufacturing product ***X*** and might place an order for chemicals ***C***, ***D*** and ***E*** in the near future. To a supplier that produces any of the specialty chemicals ***C***, ***D*** and ***E***, knowledge of the purchase of chemicals ***A*** and ***B*** and *when such purchase occurred*, might be very valuable.

It will be clear to those skilled in the art how to compile such statistics, which, in some embodiments, are stored in statistics database **436**. The statistics are advantageously re-compiled each time a new sale is made. The operation of compiling statistics is depicted, figuratively, in FIG. 9 by signal **958** (*i.e.*, delivering purchasing/sales information to statistics database) and by signal **960** (*i.e.*, delivering requirements information to statistics database).

Because the statistics compiled in statistics database **436** are valuable (*i.e.*, to specialty chemicals suppliers, among others) they can be sold. FIG. 9 depicts the disbursement of statistics, via signal **962**, to statistics subscribers **210** on any basis desired (*e.g.*, in exchange for money, as incentive to patronize data processing system **202**, *etc.*).

Among the many benefits that the present invention provides is the ability for a supplier to offer a non-branded product. As discussed in the *Summary* section, selling a non-branded product via conventional sales channels is somewhat problematic. In particular, to what standard and specification does the supplier reference its unbranded product? In accordance with the present teachings, analyses of all batches of specialty chemicals that are offered for sale through data processing system **202** are advantageously referenced to the applicable uniform standard, thereby circumventing this problem.

A method for selling non-branded product in accordance with the present invention is consistent with the methods already described. In particular, such a method comprises:

- receiving a sample of a batch of a first specialty chemical that is to be sold at a reduced price through a data processing system;
- analyzing the sample according to an applicable uniform standard of chemical and physical characteristics and methods;
- inputting the analyses into the data processing system;
- receiving, at the data processing system, a requirement for the first specialty chemical from a prospective purchaser; and
- outputting, from the data processing system, an indicium of the batch and the reduced selling price to a prospective purchaser if the analyses of the batch satisfies the requirement established by the prospective purchaser.

It is to be understood that the above-described embodiments are merely illustrative of the invention and that many variations can be devised by those skilled in the art without departing from the scope of the following claims and their equivalents.

What is claimed is:

1. A method comprising:

receiving, at a data processing system, a requirement from a prospective purchaser for a first chemical;

comparing, in said data processing system, said requirement to analyses of batches of said first chemical that are available for purchase through said data processing system to identify a batch that satisfies said requirement; and

outputting, from said data processing system, an indicium of said identified batch to said prospective purchaser.

2. The method of claim 1 wherein said analyses are stored in an inventory database in said data processing system.

3. The method of claim 1 further comprising obtaining said analyses from a testing facility that tests samples of said batches in accordance with a uniform standard that is established for said first chemical.

4. The method of claim 1 further comprising:

compiling statistics in said data processing system, said statistics comprising information about purchases of said first chemical and purchases of other chemicals facilitated by said data processing system; and

outputting said statistics to a statistics subscriber.

5. The method of claim 1 further comprising storing said requirement in a requirements database.

6. The method of claim 2 further comprising:

updating said inventory database by obtaining further analyses of further batches of said first chemical, wherein said further batches are analyzed in accordance with a uniform standard established for said first chemical; and

inputting said further analyses into said inventory database.

7. The method of claim 6 further comprising:

updating said inventory database by obtaining analyses of batches of a second chemical, wherein said batches are analyzed in accordance with a uniform standard established for said second chemical; and

inputting said analyses of batches of said second chemical into said inventory database.

8. The method of claim 1 wherein said identified batch of said first chemical is priced below a price at which said first chemical is normally sold.

9. A method comprising:

establishing a uniform standard for a chemical, the uniform standard including a supplier-independent set of physical and chemical characteristics of said chemical;

analyzing, according to said uniform standard, a first sample of a batch of said chemical from a first supplier and a second sample of a batch of said chemical from a second supplier; and

inputting analyses of said first sample and analyses of said second sample into a data processing system.

10. The method of claim 9 further comprising storing said analyses of said first sample and said analyses of said second sample in an inventory database.

11. The method of claim 9 further comprising receiving, at said data processing system, a requirement from a prospective purchaser for said chemical.

12. The method of claim 11 further comprising comparing, in said data processing system, said requirement to said analyses of said first sample and said second sample.

13. The method of claim 12 further comprising determining, via said data processing system, if said analyses of said first sample and said second sample satisfy said requirement for said chemical.

14. A method comprising:

outputting, from a data processing system, a uniform standard for a chemical, said uniform standard defined by a supplier-independent set of physical and chemical characteristics of said chemical; and

receiving, at said data processing system, a requirement from a prospective purchaser for said chemical, said requirement comprising an allowable range of values for at least some of said physical and chemical characteristics that define said uniform standard.

15. The method of claim 14 further comprising storing said requirement in said data processing system.

16. The method of claim 14 further comprising comparing, via said data processing system, said requirement to analyses of batches of said chemical that are available for purchase through said data processing system.

17. The method of claim 16 further comprising outputting, from said data processing system, an indicium of a batch of said chemical that satisfies said requirement.

18. A method for selling a non-branded product, comprising:

analyzing, according to a uniform standard, a sample of a batch of a chemical supplied by a first supplier;

inputting analyses of said sample into a data processing system; and

outputting, from said data processing system to a prospective purchaser, an indicium of said batch if said analyses satisfies a requirement for said chemical established by said prospective purchaser, wherein said inidicium does not identify said batch by supplier, by brand name or other identifying designation.

19. The method of claim 18 further comprising offering said batch for sale at a price that is lower than an offering price of branded batches of said chemical of said first supplier.

ABSTRACT

A data processing system that facilitates the buying and selling of specialty chemicals. A uniform standard and specification is established for each specialty chemical that is being offered for sale via the system. The uniform standard and specification is advantageously supplier independent so that a prospective purchaser can directly compare offerings from different suppliers. A prospective purchaser defines a requirement for a specialty chemical that it wishes to purchase. The requirement, which defines acceptable ranges for the characteristics that make up the standard, is input into the data processing system. The requirement is compared, in the data processing system, with analyses of batches of the specialty chemical that are available for purchase through the data processing system in an attempt to find a batch that satisfies the requirement. An indicium of a batch satisfying the requirement is output, from the data processing system, to the prospective purchaser.

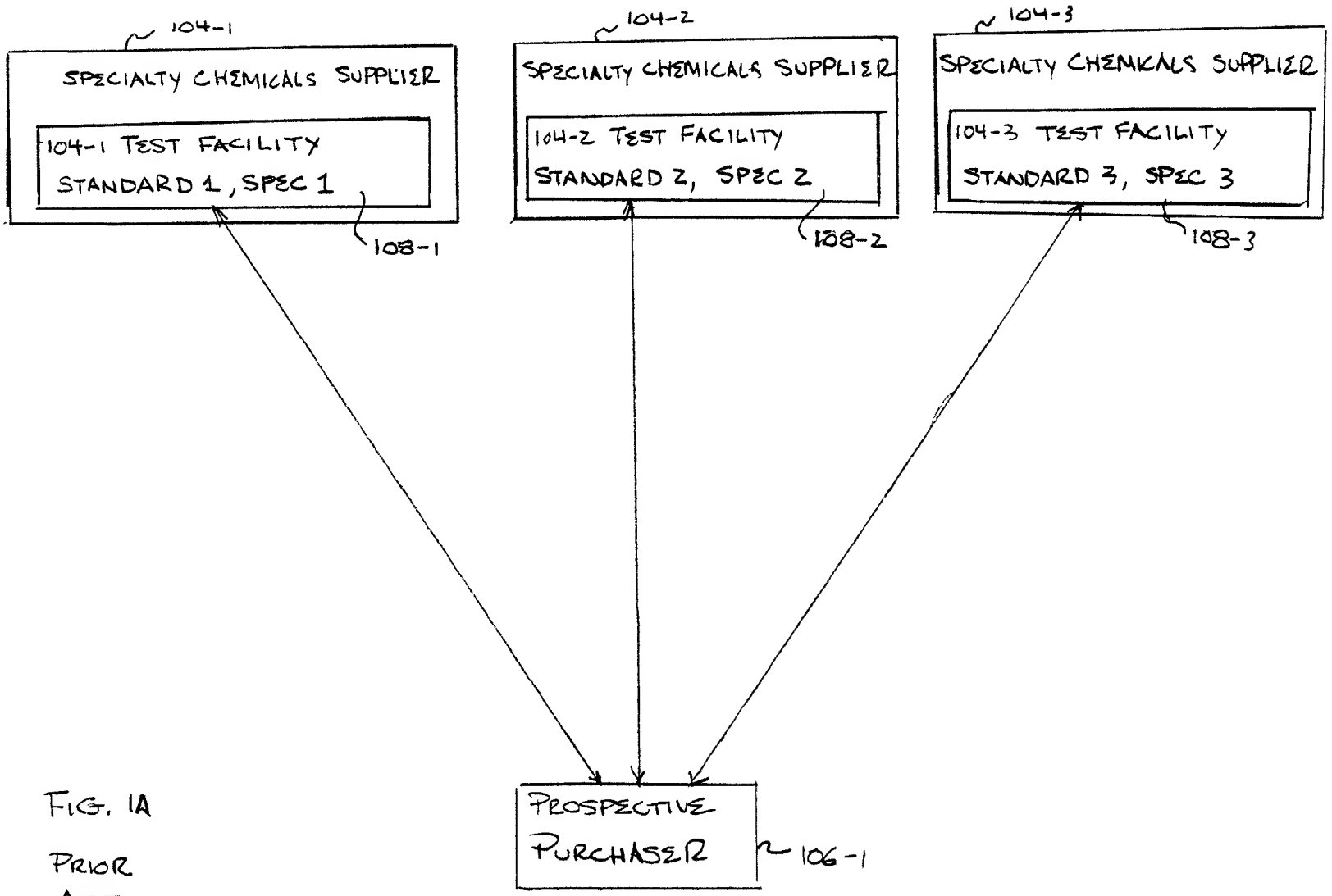


FIG. 1A

PRIOR
ART

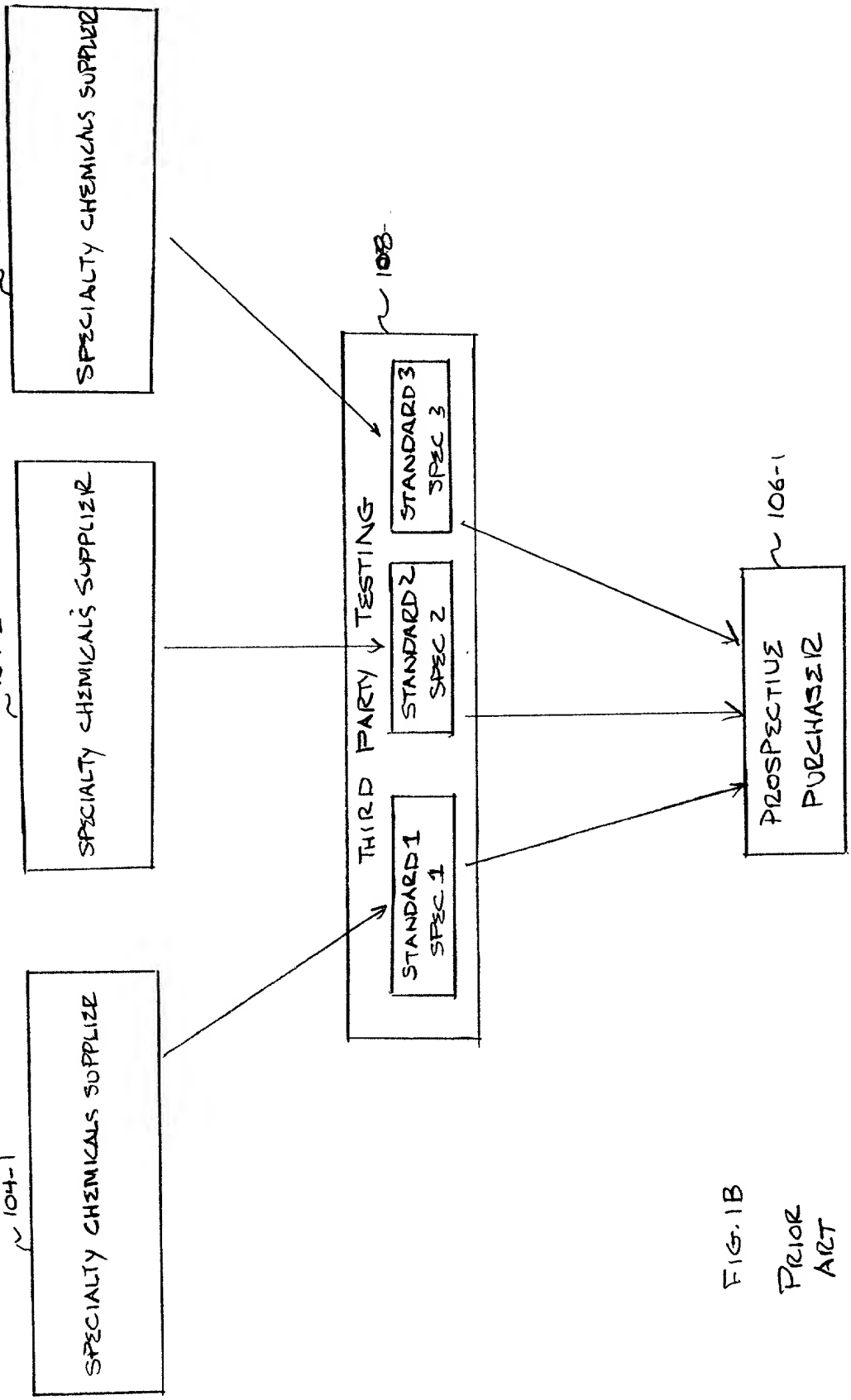


FIG. 1B
PRIOR ART

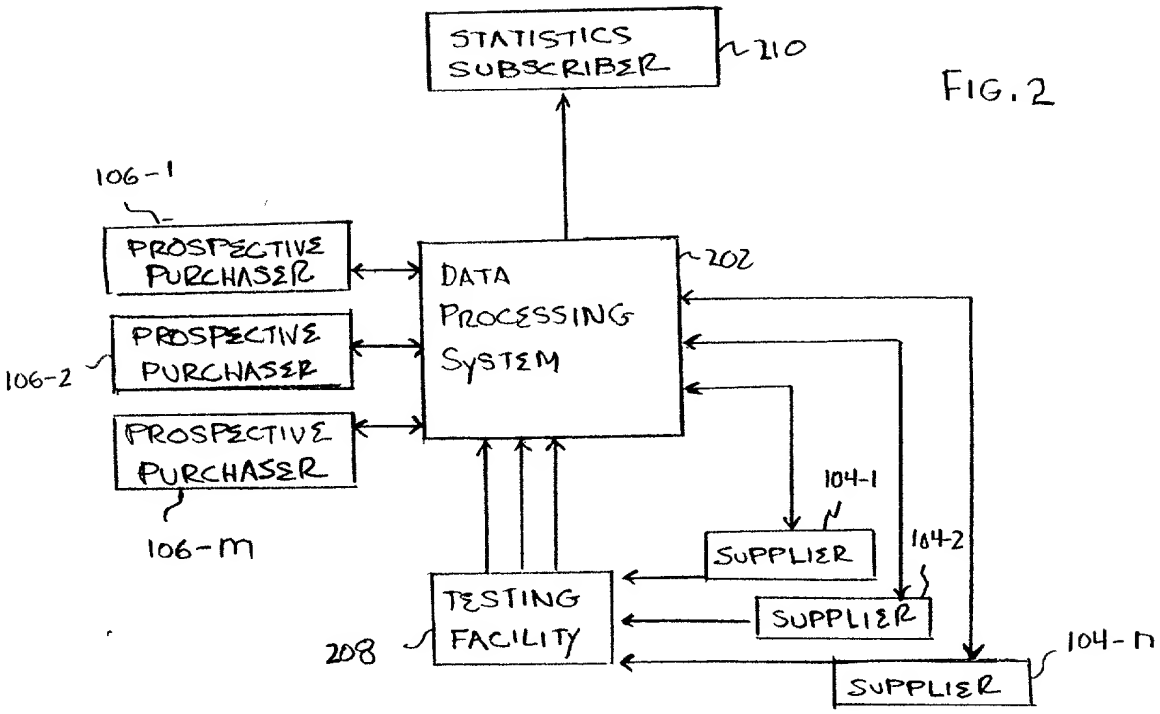
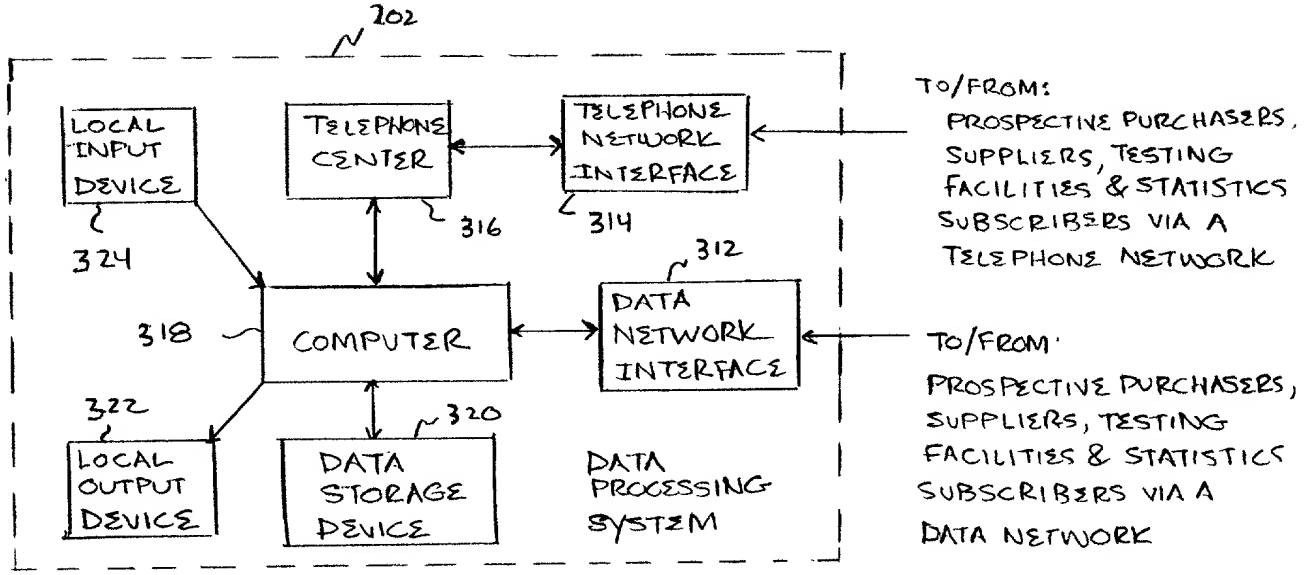

STATISTICS SUBSCRIBER
210
106-1
PROSPECTIVE PURCHASER
106-2
PROSPECTIVE PURCHASER
PROSPECTIVE PURCHASER
106-m
DATA PROCESSING SYSTEM
202
104-1
SUPPLIER
104-2
SUPPLIER
104-n
SUPPLIER
TESTING FACILITY
208

FIG. 2

FIG. 3


202
LOCAL INPUT DEVICE
324
TELEPHONE CENTER
316
TELEPHONE NETWORK INTERFACE
314
TO/FROM: PROSPECTIVE PURCHASERS, SUPPLIERS, TESTING FACILITIES & STATISTICS SUBSCRIBERS VIA A TELEPHONE NETWORK
312
318
COMPUTER
DATA NETWORK INTERFACE
TO/FROM: PROSPECTIVE PURCHASERS, SUPPLIERS, TESTING FACILITIES & STATISTICS SUBSCRIBERS VIA A DATA NETWORK
322
320
LOCAL OUTPUT DEVICE
DATA STORAGE DEVICE
DATA PROCESSING SYSTEM

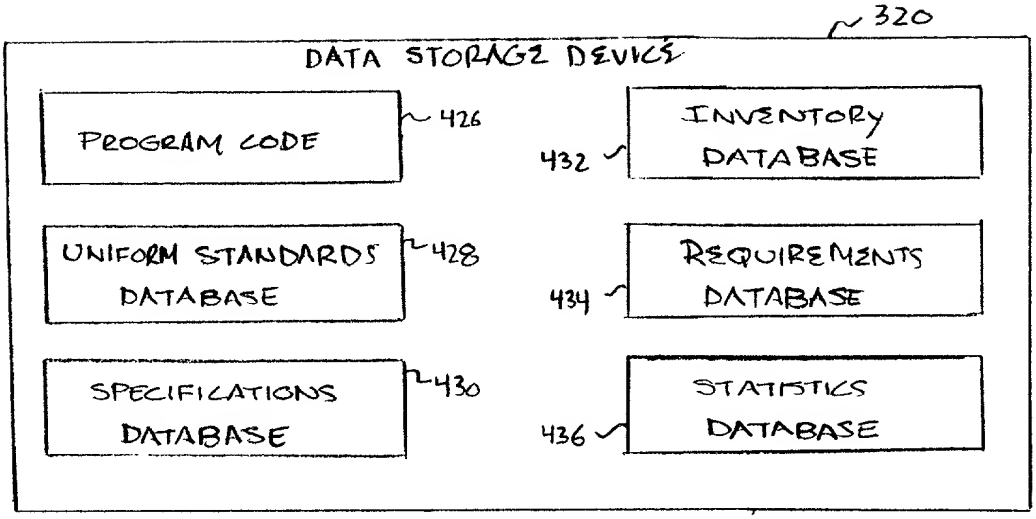

320
DATA STORAGE DEVICE
PROGRAM CODE
426
INVENTORY DATABASE
432
UNIFORM STANDARDS DATABASE
428
REQUIREMENTS DATABASE
434
SPECIFICATIONS DATABASE
430
STATISTICS DATABASE
436

FIG. 4

FIG. 5

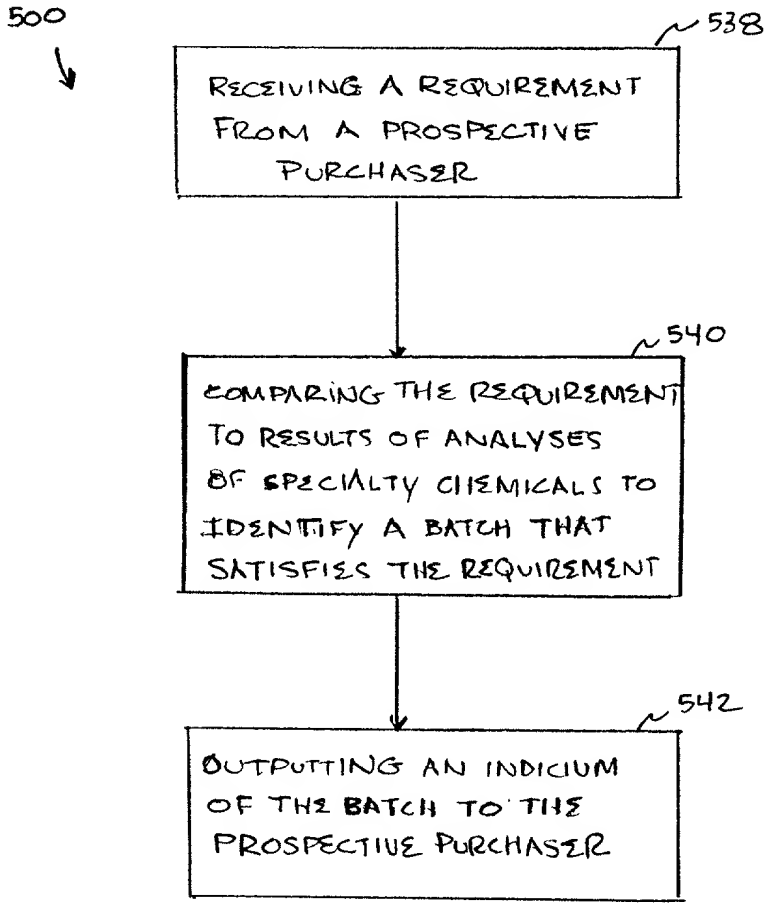

500
538
RECEIVING A REQUIREMENT FROM A PROSPECTIVE PURCHASER
540
COMPARING THE REQUIREMENT TO RESULTS OF ANALYSES OF SPECIALTY CHEMICALS TO IDENTIFY A BATCH THAT SATISFIES THE REQUIREMENT
542
OUTPUTTING AN INDICIUM OF THE BATCH TO THE PROSPECTIVE PURCHASER

FIG. 6

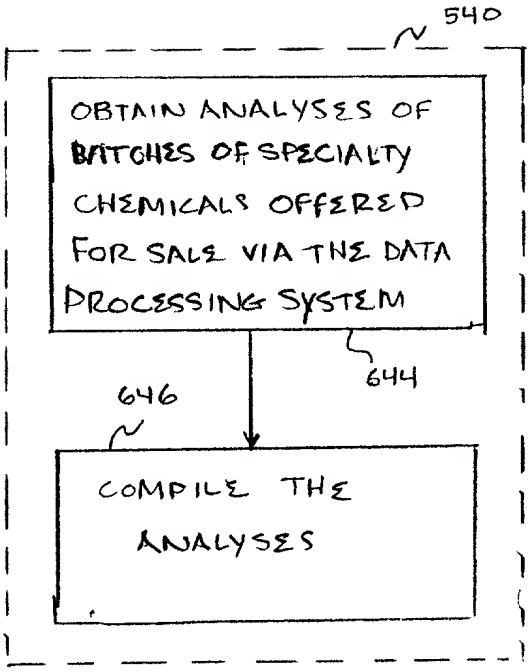
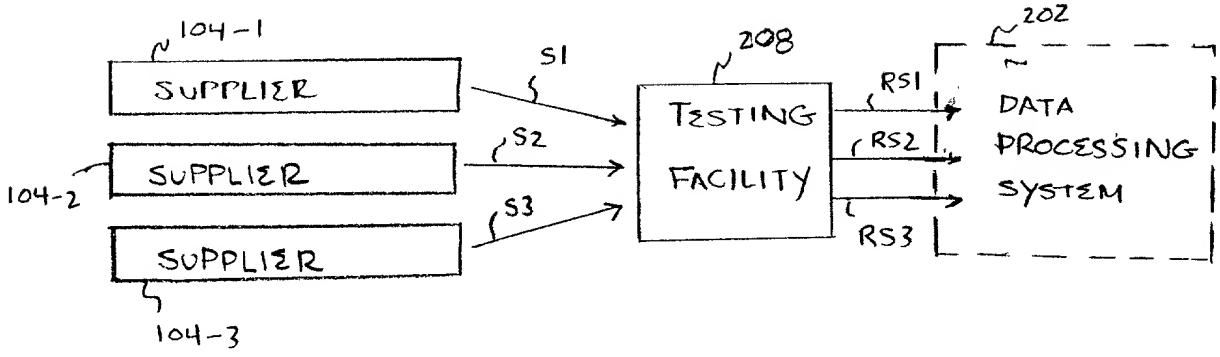

540
OBTAIN ANALYSES OF BATCHES OF SPECIALTY CHEMICALS OFFERED FOR SALE VIA THE DATA PROCESSING SYSTEM
644
646
COMPILE THE ANALYSES

FIG. 7


104-1
SUPPLIER
S1
104-2
SUPPLIER
S2
SUPPLIER
S3
104-3
208
TESTING FACILITY
RS1
RS2
RS3
202
DATA PROCESSING SYSTEM

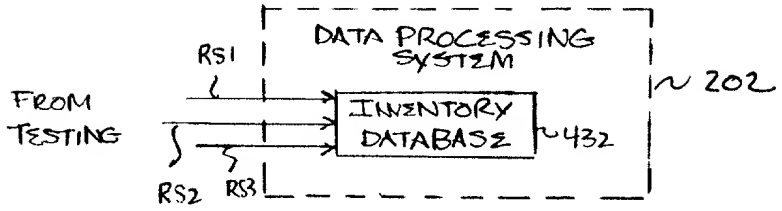
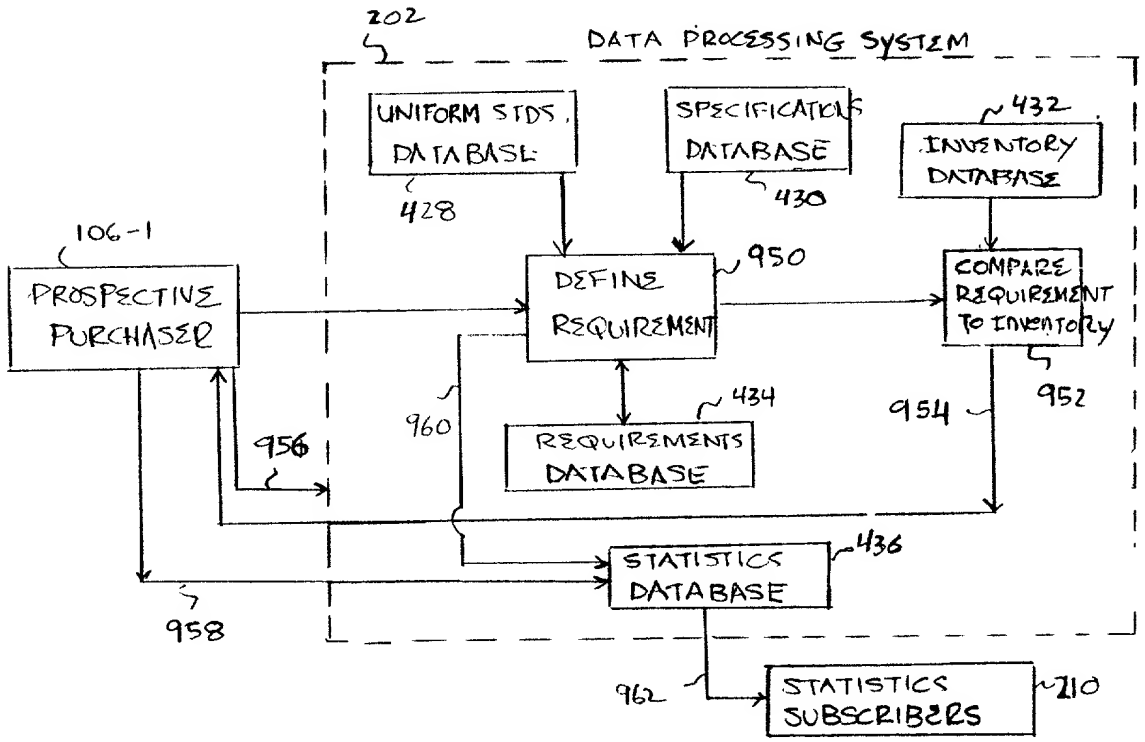

DATA PROCESSING SYSTEM
RS1
FROM TESTING
INVENTORY DATABASE
432
202
RS2
RS3

FIG. 8

FIG. 9


202
DATA PROCESSING SYSTEM
UNIFORM STDS. DATABASE
428
SPECIFICATIONS DATABASE
430
432
INVENTORY DATABASE
106-1
PROSPECTIVE PURCHASER
DEFINE REQUIREMENT
950
COMPARE REQUIREMENT TO INVENTORY
952
954
960
434
REQUIREMENTS DATABASE
956
958
STATISTICS DATABASE
436
962
STATISTICS SUBSCRIBERS
210

IN THE UNITED STATES
PATENT AND TRADEMARK OFFICE

Declaration and Power of Attorney

As the below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and joint inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled **DATA PROCESSING SYSTEM FOR PROVIDING AN EFFICIENT MARKET FOR SPECIALTY CHEMICALS,** the specification of which is attached hereto.

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by an amendment, if any, specifically referred to in this oath or declaration.

I acknowledge the duty to disclose all information known to me which is material to patentability as defined in Title 37, Code of Federal Regulations, 1.56.

I hereby claim the benefit under Title 35, United States Code, 119(e) of any United States provisional application(s) identified below:

None

I hereby claim foreign priority benefits under Title 35, United States Code, 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

None

I hereby claim the benefit under Title 35, United States Code, 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, 112, I acknowledge the duty to disclose all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application:

None

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

I hereby appoint the following attorneys with full power of substitution and revocation, to prosecute said application, to make alterations and amendments therein, to receive the patent, and to transact all business in the Patent and Trademark Office connected therewith:

Jason Paul DeMont	(Reg. No. 35,793)
Wayne S. Breyer	(Reg. No. 38,089)

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Inventor's signature _____ Date 9-19-00

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Citizenship: United States of America

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